

# Integrating education with consumer behaviour relevant to energy efficiency and climate change at the universities of Russia, Sri Lanka and Bangladesh (BECK)

# MODULE SPECIFICATION

Originating Institution, Department	Module Co-ordinator(s)
M.V.LOMONOSOV MOSCOW STATE UNIVERSITY, Faculty of Economics	Prof. Vladimir Echenique

#### TITLE OF THE MODULE

Title of the module	Module code <sup>1</sup>
International Risk Management and Climate Change	-

#### PROGRAMME(S) IN WHICH TO BE OFFERED:

Main field of study for the qualification (specialization): 38.04.02 Management

Profile of the master program: International Business Management

#### LEVEL OF STUDIES<sup>2</sup>

First cycle (BSc/BA)	Second cycle (MSc/MA) 🔀	Third cycle (PhD) 🗌
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#### **CREDITS AND LEARNING HOURS**

Credit Value <sup>3</sup>	ECTS Value <sup>4</sup>	Indicative academic learning hours <sup>5</sup>	Length (in Semesters) <sup>6</sup>	Year in which to be offered
3	3	108	1	1

#### ANNOTATION OF THE MODULE<sup>7</sup>

<sup>4</sup> European Credit Transfer System, 1 ECTS = 25-30 academic learning hours. Please refer to



<sup>&</sup>lt;sup>1</sup> To be indicated by the Institution

<sup>&</sup>lt;sup>2</sup> According to the Framework of Qualifications for the European Higher Education Area, Annex 8: <u>http://www.aic.lv/ace/ace\_disk/Bologna/Bergen\_conf/Reports/EQFreport.pdf</u>

<sup>&</sup>lt;sup>3</sup> Permissible credit values as set out in Institution's Academic Regulations

ECTS Users' Guide: https://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide\_en.pdf

<sup>&</sup>lt;sup>5</sup> 1 academic learning hour is equal to 45 minutes

<sup>&</sup>lt;sup>6</sup> Indicate 0.5, 1, 1.5 or 2

<sup>&</sup>lt;sup>7</sup> Please provide brief summary of the module, up to 200 words



The course develops a holistic view on the risk management and business risks associated with climate change. The course provides understanding of how the concept of UN Sustainable development goals (SDGs) impacts business strategic decisions and how climate change risks could be mitigated. Major approaches to risk assessment and risk management are addressed in the course.

The concept of green marketing is introduced, students learn principles and develop skills of sustainable consumption, and how this could help to reduce carbon footprint and mitigate climate change. The course based on case studies and best practices worldwide. The course is provided through Moodle platform (on.econ.msu.ru), using a combination of off-line and on-line activities. At the end of the course students are required to prepare and present a group project.

#### AIM OF THE MODULE<sup>8</sup>

To introduce modern theories to students and provide skills for the development of business risk management integrated with consumer behaviour relevant to energy efficiency and climate change.

# MOOC LEARNING AND TEACHING STRATEGIES

The course is opened to full-time students of International Business Management Master program and to exchange students. The common features of the course are:

- Digital openness: courses available online;
- Learner-centred approach: courses aid students to construct their own learning from a rich environment, and to share and communicate it with others;
- Independent learning: a course provides high quality materials to enable the progress of an independent learner through self-study, however it is obligatory to participate at on-line seminar, during which it's important to interact with peers.
- Media-supported interaction: course materials make best use of online affordances (interactivity, communication, collaboration) as well as rich media (video and audio) to engage students with their learning.
- Quality focus: focus on quality in the production and presentation of a course.

# Methods of learning and teaching of the course:

- **video-lectures** (Seminars/lectures are video-recorded and posted on the course platform together with ppts of the on-line lectures);

- *video-practical exercises* (on-line meetings with students in real time). Use of active teaching methods: training cases, business games, project methods, Brainstorm methods. Conducting online discussions. Orientation to independent thinking, initiative. The formation of the skills of scientific research, creative work, the ability to prepare a presentation;

- *Independent work of students* includes the study of educational, methodological, reference and additional literature on topics, preparation for practical classes, group work by full-time students (group projects preparation). Students gain access to additional resources available at EF MSU electronic subscriptions to various databases, including Science Direct, Scopus, SPARK, World Bank, etc. Posting some teaching materials on the course plarform.

#### Assessment of knowledge:

• Participation in discussions

<sup>&</sup>lt;sup>8</sup> Aim of the module must correspond to the BECK Capacity Building Framework





- Written mini-tests during seminars
- Project preparation and defense
- Final test

#### Feedback:

- 1) Meeting with the professor during consultations;
- 2) Use of forums for operational communication and consultation;
- 3) Communication with a student using E-mail

#### Training and methodical materials:

- video and audio files;
- prereading;
- presentations;
- questions for the exam or test, self-preparation, presentation of the project, case-studies;
- homework (essay, tests).

#### INTENDED LEARNING OUTCOMES AND ASSESSMENT

Learning Methods of studies Outcomes of the module <sup>9</sup>		nes of the student achievements <sup>10</sup>	
KNOW the laws of markets' functioning and the basic principles of economic agents' behavior and associated risks M.PC-5.Kn.1	Blended learning, integrated affective tutoring and affective computing methods.	<ul> <li>Problematic questions</li> <li>Intelligent tests</li> <li>Regular tests</li> <li>Problematic tasks</li> <li>Projects</li> <li>Peer evaluation</li> <li>Automated feedback</li> <li>Final evaluation</li> <li>Other: assessment of a written group essay</li> </ul>	

<sup>&</sup>lt;sup>10</sup> Please select from the list. Additional assessment methods may be added.





<sup>&</sup>lt;sup>9</sup> Learning outcomes are specified in three categories – as **knowledge, skills and competence**. This signals that qualifications – in different combinations – capture a broad scope of learning outcomes, including theoretical knowledge, practical and technical skills, and social competences where the ability to work with others will be crucial. Please refer to Cedefop (2017). Defining, writing and applying learning outcomes: a European handbook. Luxembourg: Publications Office of the European Union. <u>https://www.cedefop.europa.eu/files/4156\_en.pdf.</u> Learning outcomes of the module must correspond to the BECK Capacity Building Framework.

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		BECK
KNOW models that	Blended learning,	Problematic questions
consider the	integrated affective	Intelligent tests
behavior of	tutoring and	🔀 Regular tests
economic agents	affective computing	Problematic tasks
and markets in the	methods.	🔀 Projects
global		Peer evaluation
environmental		🔀 Automated feedback
issues		Final evaluation
M.PC-5.Kn.2		Other:
KNOW models that	Blended learning,	Problematic questions
consider the	integrated affective	Intelligent tests
behavior of	tutoring and	🔀 Regular tests
economic agents	affective computing	Problematic tasks
and markets in the	methods.	Projects
global environment		Peer evaluation
and climate change		Automated feedback
mitigation		Final evaluation
M.PC-5.Ab.2		Other: activity
		assessment
BE ABLE to predict	Blended learning,	Problematic questions
and manage the	integrated affective	Intelligent tests
risks of business	tutoring and	Regular tests
activities in a	affective computing	Problematic tasks
foreign territory	methods.	🔀 Projects
specially taking into		Peer evaluation
account climate		Automated feedback
change mitigation		Final evaluation
M.SPC-2.Ab.4		Other: activity
		assessment

#### MODULE MARK CALCULATION<sup>11</sup>:

Types of assessment tools	Scores
Participation in discussions, written mini-tests in class	52.5
Project preparation and defense	52.5
Written test	45
Total	150

# The final assessment on discipline is done on the basis of the following criteria:

Final grade	Minimum score	Maximum score
Excellent	127,5	150
Good	97,5	127,4
Satisfactory	60	97,4
Failed	30	59,9

<sup>&</sup>lt;sup>11</sup> Please list all components, sum must be equal to 100%. Note that successful course completion should be recognised as indicating worthwhile educational achievement.





**Comment:** in case student's scores obtained during the trimester are less than 20% of the maximum score of the discipline the following rule of passing the course should be applied at the midterm assessment (and further re-examination): 'a student can obtain only a satisfactory mark and only in case he/she receives for the midterm assessment, including all the course material, not less than 85% of the score allocated to this assessment'.

#### SYLLABUS OUTLINE

		Including			
Section/topic title	Total, hours	Conta	Self-directed		
		Classroom work, hours	Group, hours	Individual, hours	studies, hours
Topic 1. Introduction to Risk Management	10	4	-	-	6
Topic 2. Risk Research, Assessment and Management	14	4	2	2	6
Topic 3. Risks Associated with Climate Change	18	4	4	4	6
Topic 4. Impact of Climate Change on Economy, Human Health and Mortality	18	4	4	4	6
Topic 5. Green Consumer Behavior	14	4	2	2	6
Presentation of final projects	24	4	-	-	20
Midterm assessment (control): — Written test	10	4	-	-	6
Total	108	28	12	12	56

# Structure and content of the course

# **Topic 1. Introduction to Risk Management**

- 1.1 Introduction to the Discipline. Subjects of the Final Projects.
- 1.2 International Standards and Risk Definition.
- 1.3 Risk Classifications.
- 1.4 Risk Management as a Profession.

# Main Literature:

- 1. Pritchard C. Risk Management: Concepts and Guidance, Fifth edition. CRC Press, 2015. chapters 1- 2
- 2. Hopkin P. Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management. Fourth edition. The Institute of Risk Management, 2017, chapters 1, 4

# Additional Literature:

- Merna T., AL-Thani F. Corporate Risk Management. 2<sup>nd</sup> ed., 2008, chapters 1, 10
- 2. Steinberg, N. Governance, Risk Management, and Compliance: It Can't Happen to Us--Avoiding Corporate Disaster While Driving Success. 2011, chapter 6

# Topic 2. Risk research, assessment and management

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- 2.1 Strategic goals in Risk Management.
- 2.2 Research on External and Internal Risks.
- 2.3 International Risk Classification and Risk Maps.
- 2.4 Global Risk Assessment and Projection.

#### Main Literature:

- 1. Pritchard C. Risk Management: Concepts and Guidance, Fifth edition. CRC Press, 2015. chapter 2
- 2. Hopkin P. Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management. Fourth edition. The Institute of Risk Management, 2017 chapters 1-2, 5-6
- 3. Global Risk Report 2020. World Economic Forum, 2019.

#### Additional Literature:

- 1. Casualty Actuarial Society. Overview of Enterprise Risk Management.2003. https://www.casact.org/area/erm/overview.pdf
- Merna T., AL-Thani F. Corporate Risk Management. 2<sup>nd</sup> ed., 2008, chapters 2-3
- 3. Loss and Damage from Climate Change. Concepts, Methods and Policy Options. Editors: Reinhard Mechler, Laurens M. Bouwer, Thomas Schinko, Swenja Surminski and JoAnne Linnerooth-Bayer. Springer Open, 2019.

#### Topic 3. Risks Associated with Climate Change

- 3.1 International Documents on Climate Change
- 3.2 Paris Agreement on Climate Change 2015.
- 3.3 Climate Risk Management and Mitigation.

#### Main Literature:

- 1. Paris Agreement on Climate Change 2015.
- 2. EU Policy Framework for Climate and Energy in the period from 2020 to 2030. Brussels, 22.1.2014
- 3. Global Warming of 1.5°C. Summary for Policymakers. IPCC, 2018.

#### Additional Literature:

- 1. Climate risk and response. Physical hazards and socioeconomic impacts. McKensey Global Institute, January 2020.
- 2. Global Assessment Report on Disaster Risk Reduction. UN, 2019.
- 3. Trends and projection in Europe. Tracking progress towards Europe's climate and energy targets. European Energy Agency Report, #15, 2019.
- 4. Loss and Damage from Climate Change. Concepts, Methods and Policy Options. Editors: Reinhard Mechler, Laurens M. Bouwer, Thomas Schinko, Swenja Surminski and JoAnne Linnerooth-Bayer. Springer Open, 2019.

#### Topic 4. Impact of Climate Change on Economy, Human Health and Mortality

- 4.1 Impact of Climate Change on Health and Human Mortality
- 4.2 Impact of Climate Change on Finance
- 4.3 Transition to Low Carbon Economy
- 4.4 New technologies and Climate Change

#### Main Literature:

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- 1. WHO health and climate change survey report. Tracking global progress. WHO, 2019
- 2. A call for action: Climate change as a source of financial risk. Network for Greening the Financial System, 2019.
- 3. Climate Change and the Insurance Industry: Taking Action as Risk Managers and Investors. Geneva Association, 2018.
- 4. A guidebook to the Green Economy. Issue 1: Green Economy, Green Growth, and Low-Carbon Development history, definitions and a guide to recent publications. UNDESA, 2012.
- 5. Absolute Zero. Delivering the UK's climate change commitment with incremental changes to today's technologies. London, 2020.

# Additional Literature:

- 1. COP24 special report on health and climate change. WHO, 2019.
- 2. Renewables 2019. Global status report, REN21, 2019.
- 3. Lights out. The risks of climate and natural disaster related disruption to the electric grid. SwissRe, 2017.

# **Topic 5. Green Consumer Behavior**

5.1 Lifestyle Carbon Footprints

5.2 Nutrition and Housing

- 5.3 Mobility and Goods
- 5.4 Leisure and Services

# Main Literature:

- 1. 1.5-DEGREE LIFESTYLES: Targets and options for reducing lifestyle carbon footprints. Institute for Global Environmental Strategies, 2019.
- 2. Beibei Yue, Guanghua Sheng, Shengxiang She, and Jiaqi Xu. Impact of Consumer Environmental Responsibility on Green Consumption Behavior in China: The Role of Environmental Concern and Price Sensitivity. In: Sustainability 2020, 12.

# Additional Literature:

- 1. Peattie, K. Green consumption: behavior and norms. Annual Review of Environment and Resources, 35(1), 2010.
- 2. Faye Duchin. Sustainable Consumption of Food. Research Gate, 31 May 2014.
- 3. Handbook of Research on Sustainable Consumption.
- 4. Back to Our Common Future Sustainable Development in the 21st century (SD21) project. UNDESA, 2012

# LEARNING MATERIALS<sup>12</sup>

Core materials (up to 5 references):

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<sup>&</sup>lt;sup>12</sup> Courses should provide high quality materials to enable an independent learner to progress through selfstudy. Materials should make best use of online affordances (interactivity, communication, collaboration) as well as rich media (video and audio) to engage students with their learning.



- 1. Pritchard C. Risk Management: Concepts and Guidance, Fifth edition. CRC Press, 2015.
- Hopkin P. Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management. Fourth edition. The Institute of Risk Management, 2017
- 3. Global Risk Report 2020. World Economic Forum, 2019.

# Supplementary materials (up to 10 references):

- 1. Merna T., AL-Thani F. Corporate Risk Management. 2<sup>nd</sup> ed., 2008
- 2. Steinberg, N. Governance, Risk Management, and Compliance: It Can't Happen to Us--Avoiding Corporate Disaster While Driving Success. 2011
- 3. Merna T., AL-Thani F. Corporate Risk Management. 2<sup>nd</sup> ed., 2008
- 4. Loss and Damage from Climate Change. Concepts, Methods and Policy Options. Editors: Reinhard Mechler, Laurens M. Bouwer, Thomas Schinko, Swenja Surminski and JoAnne Linnerooth-Bayer. Springer Open, 2019.
- 5. Climate risk and response. Physical hazards and socioeconomic impacts. McKensey Global Institute, January 2020.
- 6. Global Assessment Report on Disaster Risk Reduction. UN, 2019.
- 7. Trends and projection in Europe. Tracking progress towards Europe's climate and energy targets. European Energy Agency Report, #15, 2019.
- 8. Loss and Damage from Climate Change. Concepts, Methods and Policy Options. Editors: Reinhard Mechler, Laurens M. Bouwer, Thomas Schinko, Swenja Surminski and JoAnne Linnerooth-Bayer. Springer Open, 2019.
- 9. 1.5-DEGREE LIFESTYLES: Targets and options for reducing lifestyle carbon footprints. Institute for Global Environmental Strategies, 2019.
- 10. Beibei Yue, Guanghua Sheng, Shengxiang She, and Jiaqi Xu. Impact of Consumer Environmental Responsibility on Green Consumption Behavior in China: The Role of Environmental Concern and Price Sensitivity. In: Sustainability 2020

# On-line resources<sup>13</sup>:

- 1. Casualty Actuarial Society. Overview of Enterprise Risk Management.2003. https://www.casact.org/area/erm/overview.pdf
- 2. Green Growth Knowledge Platform: https://www.greengrowthknowledge.org/theme/climate-change
- 3. Climate Change & Resilience Information Centre: <u>https://careclimatechange.org/</u>
- 4. Climate ADAPT: <u>https://climate-adapt.eea.europa.eu</u>

# Other materials:

Lecture materials available at the BECK Simulated Big Data Interuniversity Networked Affective Educational Centre.

# **REQUIRED IT RESOURCES<sup>14</sup>**

# No. Software, manufacturer

<sup>13</sup> Please provide links



<sup>&</sup>lt;sup>14</sup> Please add as many software as needed for the course



1.	MS Word
2.	MS Excel
3.	MS Power Point
4.	Adobe Acrobat reader
5.	Moodle

Date of completion of this version of Module Specification January 2020

Date of approval by the Faculty: February 2020

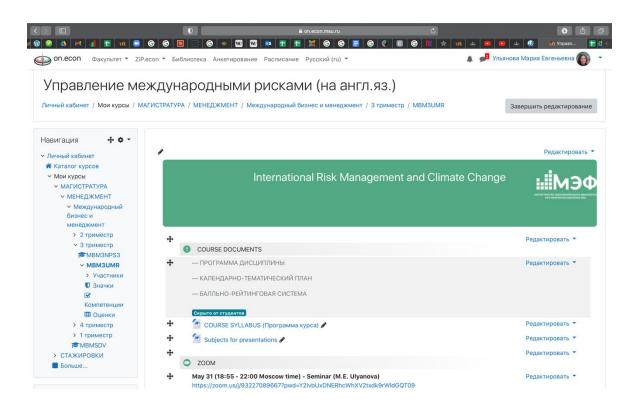






# **Course Implementation**

Level	Degree	Program	Intake 2019/20	Intake 2020/21	TOTAL
Master	MSc in Management	International Business Management	18 students	33 students	51 students



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